

These search results have not been confirmed by NIEHS and are therefore, not official. They are to be used only for general information and to inform the public and grantees on the breadth of research funded by NIEHS.

Viewing 96 publications

Print version (PDF)

(<http://www.niehs.nih.gov//portfolio/index.cfm/portfolio/sciencecodepubs/sc/77/topic/77/format/word>)

Publication Title	Authors	Journal (Pub date)	Volume/Page	PubMed Link
(1)H NMR Metabolomics Study of Metastatic Melanoma in C57BL/6J Mouse Spleen.	Wang, Xuan; Hu, Mary; Feng, Ju; Liu, Maili; Hu, Jian Zhi	Metabolomics (2014 Dec)	10 / 1129-1144	PubMed Citation
(1)H NMR Metabolomics Study of Spleen from C57BL/6 Mice Exposed to Gamma Radiation.	Xiao, X; Hu, M; Liu, M; Hu, J Z	Metabolomics (Los Angel)	6 / 1-11 (2016)	PubMed Citation
(13)C Tracer Studies of Metabolism in Mouse Tumor Xenografts.	Lane, Andrew N; Yan, Jun; Fan, Teresa W-M	Bio Protoc (2015 Nov 20)	5 /	PubMed Citation
A Carbonyl Capture Approach for Profiling Oxidized Metabolites in Cell Extracts.	Mattingly, Stephanie J; Xu, Tao; Nantz, Michael H; Higashi, Richard M; Fan, Teresa W-M	Metabolomics (2012)	8 / 989-996	PubMed Citation
A Computational Framework for High-Throughput Isotopic Natural Abundance Correction of Omics-Level U ...	Carreer, William J; Flight, Robert M; Moseley, Hunter N B	Metabolites (2013 Sep 25)	3 /	PubMed Citation
A metabolomics investigation of non-genotoxic carcinogenicity in the rat.	Ament, Zsuzsanna; Waterman, Claire L; West, James A; Waterfield, Catherine; Currie, Richard A; Wright, Jayne; Griffin, Julian L	J Proteome Res (2013 Dec 6)	12 / 5775-90	PubMed Citation
A roadmap for the XCMS family of software solutions in metabolomics.	Mahieu, Nathaniel G; Genenbacher, Jessica Lloyd; Patti, Gary J	Curr Opin Chem Biol (2016 Feb)	30 / 87-93	PubMed Citation

A view from above: cloud plots to visualize global metabolomic data.	Patti, Gary J; Tautenhahn, Ralf; Rinehart, Duane; Cho, Kevin; Shriver, Leah P; Manchester, Marianne; Nikolskiy, Igor; Johnson, Caroline H; Mahieu, Nathaniel G; Siuzdak, Gary	Anal Chem (2013 Jan 15)	85 / 798-804	PubMed Citation
Advancing the high throughput identification of liver fibrosis protein signatures using multiplexed ...	Baker, Erin Shammel; Burnum-Johnson, Kristin E; Jacobs, Jon M; Diamond, Deborah L; Brown, Roslyn N; Ibrahim, Yehia M; Orton, Daniel J; Piehowski, Paul D; Purdy, David E; Moore, Ronald J; Danielson 3rd, William F; Monroe, Matthew E; Crowell, Kevin L; Slysz, Gordon W; Gritsenko, Marina A; Sandoval, John D; Lamarche, Brian L; Matzke, Melissa M; Webb-Robertson, Bobbie-Jo M; Simons, Brenna C; McMahon, Brian J; Bhattacharya, Renuka; Perkins, James D; Carithers Jr, Robert L; Strom, Susan; Self, Steven G; Katze,	Mol Cell Proteomics (2014 Apr)	13 / 1119-27	PubMed Citation

	Michael G; Anderson, Gordon A; Smith, Richard D			
After the feature presentation: technologies bridging untargeted metabolomics and biology.	Cho, Kevin; Mahieu, Nathaniel G; Johnson, Stephen L; Patti, Gary J	Curr Opin Biotechnol (2014 Aug)	28 / 143-8	PubMed Citation
An accelerated workflow for untargeted metabolomics using the METLIN database.	Tautenhahn, Ralf; Cho, Kevin; Uritboonthai, Winnie; Zhu, Zhengjiang; Patti, Gary J; Siuzdak, Gary	Nat Biotechnol (2012 Sep)	30 / 826-8	PubMed Citation
An Intestinal Microbiota-Farnesoid X Receptor Axis Modulates Metabolic Disease.	Gonzalez, Frank J; Jiang, Changtao; Patterson, Andrew D	Gastroenterology (2016 Nov)	151 / 845-859	PubMed Citation
An obligatory role for neuropeptides in high-fat-diet-induced obesity.	Li, Jing; Song, Jun; Zaytseva, Yekaterina Y; Liu, Yajuan; Rychahou, Piotr; Jiang, Kai; Starr, Marlene E; Kim, Ji Tae; Harris, Jennifer W; Yiannikouris, Frederique B; Katz, Wendy S; Nilsson, Peter M; Orho-Melander, Marju; Chen, Jing; Zhu, Haining; Fahrenholz, Timothy; Higashi, Richard M; Gao, Tianyan; Morris, Andrew J; Cassis, Lisa A; Fan, Teresa W-M; Weiss, Heidi L; Dobner, Paul R; Melander, Olle; Jia, Jianhang	Nature (2016 05 19)	533 / 411-5	PubMed Citation

An untargeted metabolomic workflow to improve structural characterization of metabolites.	Evers, B Mark Nikolskiy, Igor; Mahieu, Nathaniel G; Chen, Ying-Jr; Tautenhahn, Ralf; Patti, Gary J	Anal Chem (2013 Aug 20)	85 / 7713-9	PubMed Citation
Antioxidant Drug Tempol Promotes Functional Metabolic Changes in the Gut Microbiota.	Cai, Jingwei; Zhang, Limin; Jones, Richard A; Correll, Jared B; Hatzakis, Emmanuel; Smith, Philip B; Gonzalez, Frank J; Patterson, Andrew D	J Proteome Res (2016 Feb 5)	15 / 563-71	PubMed Citation
Applications of NMR spectroscopy to systems biochemistry.	Fan, Teresa W-M; Lane, Andrew N	Prog Nucl Magn Reson Spectrosc (2016 Feb)	92-93 / 18-53	PubMed Citation
Aryl hydrocarbon receptor ligands in cancer: friend and foe.	Murray, Iain A; Patterson, Andrew D; Perdew, Gary H	Nat Rev Cancer (2014 Dec)	14 / 801-14	PubMed Citation
Autonomous metabolomics for rapid metabolite identification in global profiling.	Benton, H Paul; Ivanisevic, Julijana; Mahieu, Nathaniel G; Kurczy, Michael E; Johnson, Caroline H; Franco, Lauren; Rinehart, Duane; Valentine, Elizabeth; Gowda, Harsha; Ubhi, Baljit K; Tautenhahn, Ralf; Gieschen, Andrew; Fields, Matthew W; Patti, Gary J; Siuzdak, Gary	Anal Chem (2015 Jan 20)	87 / 884-91	PubMed Citation
Bar Coding MS(2) Spectra for Metabolite Identification.	Spalding, Jonathan L; Cho, Kevin; Mahieu, Nathaniel G; Nikolskiy, Igor; Llufrio, Elizabeth M; Johnson,	Anal Chem (2016 Mar 1)	88 / 2538-42	PubMed Citation

Chemoselective detection and discrimination of carbonyl-containing compounds in metabolite mixtures ...	Stephen L; Patti, Gary J Lane, Andrew N; Magn Reson Arumugam, Chem (2015 Sengodagounder; May) Lorkiewicz, Paweł K; Higashi, Richard M; Laulhé, Sébastien; Nantz, Michael H; Moseley, Hunter N B; Fan, Teresa W-M	53 / 337-43	PubMed Citation
Credentialing features: a platform to benchmark and optimize untargeted metabolomic methods.	Mahieu, Nathaniel Guy; Anal Chem (2014 Oct 7) Huang, Xiaojing; Chen, Ying-Jr; Patti, Gary J	86 / 9583-9	PubMed Citation
Crucial role of macrophage selenoproteins in experimental colitis.	Kaushal, Naveen; J Immunol (2014 Oct 1) Kudva, Avinash K; Patterson, Andrew D; Chiaro, Christopher; Kennett, Mary J; Desai, Dhimant; Amin, Shantu; Carlson, Bradley A; Cantorna, Margherita T; Prabhu, K Sandeep	193 / 3683-92	PubMed Citation
Defining the metabolome: size, flux, and regulation.	Zamboni, Nicola; Mol Cell (2015 May 21) Saghatelian, Alan; Patti, Gary J	58 / 699-706	PubMed Citation
Detecting and removing data artifacts in Hadamard transform ion mobility-mass spectrometry measureme ...	Prost, Spencer A; J Am Soc Mass Spectrom (2014 Dec) Crowell, Kevin L; Baker, Erin S; Ibrahim, Yehia M; Clowers, Brian H; Monroe, Matthew E; Anderson, Gordon A; Smith, Richard D; Payne, Samuel H	25 / 2020-7	PubMed Citation

Development and in silico evaluation of large-scale metabolite identification methods using function ...	Mitchell, Joshua M; Fan, Teresa W-M; Lane, Andrew N; Moseley, Hunter N B	Front Genet (2014)	5 / 237	PubMed Citation
Development of a New Ion Mobility (Quadrupole) Time-of-Flight Mass Spectrometer.	Ibrahim, Yehia M; Baker, Erin S; Danielson 3rd, William F; Norheim, Randolph V; Prior, David C; Anderson, Gordon A; Belov, Mikhail E; Smith, Richard D	Int J Mass Spectrom (2015 Feb 1)	377 / 655-662	PubMed Citation
Differential incorporation of glucose into biomass during Warburg metabolism.	Chen, Ying-Jr; Huang, Xiaojing; Mahieu, Nathaniel G; Cho, Kevin; Schaefer, Jacob; Patti, Gary J	Biochemistry (2014 Jul 29)	53 / 4755-7	PubMed Citation
Discriminating precursors of common fragments for large-scale metabolite profiling by triple quadrup ...	Nikolskiy, Igor; Siuzdak, Gary; Patti, Gary J	Bioinformatics (2015 Jun 15)	31 / 2017-23	PubMed Citation
Does our gut microbiome predict cardiovascular risk? A review of the evidence from metabolomics.	Griffin, Julian L; Wang, Xinzhu; Stanley, Elizabeth	Circ Cardiovasc Genet (2015 Feb)	8 / 187-91	PubMed Citation
Enhancing biological analyses with three dimensional field asymmetric ion mobility, low field drift ...	Zhang, Xing; Ibrahim, Yehia M; Chen, Tsung-Chi; Kyle, Jennifer E; Norheim, Randolph V; Monroe, Matthew E; Smith, Richard D; Baker, Erin S	Analyst (2015 Oct 21)	140 / 6955-63	PubMed Citation
Enhancing bottom-up and top-down proteomic measurements with ion mobility separations.	Baker, Erin Shammel; Burnum-Johnson, Kristin E; Ibrahim, Yehia M; Orton, Daniel J; Monroe, Matthew E;	Proteomics (2015 Aug)	15 / 2766-76	PubMed Citation

	Kelly, Ryan T; Moore, Ronald J; Zhang, Xing; Théberge, Roger; Costello, Catherine E; Smith, Richard D	Moseley, Hunter N B	Comput Struct Biotechnol J (2013 Jan 1)	4 /	PubMed Citation
Error Analysis and Propagation in Metabolomics Data Analysis.		Gelman, Susan J; Mahieu, Nathaniel G; Cho, Kevin; Llufrio, Elizabeth M; Wencewicz, Timothy A; Patti, Gary J	Cancer Metab (2015)	3 / 13	PubMed Citation
Evidence that 2-hydroxyglutarate is not readily metabolized in colorectal carcinoma cells.		Yao, Cong-Hui; Fowle-Grider, Ronald; Mahieu, Nathanial G; Liu, Gao-Yuan; Chen, Ying-Jr; Wang, Rencheng; Singh, Manmilan; Potter, Gregory S; Gross, Richard W; Schaefer, Jacob; Johnson, Stephen L; Patti, Gary J	Cell Chem Biol (2016 Apr 21)	23 / 483-93	PubMed Citation
Exogenous Fatty Acids Are the Preferred Source of Membrane Lipids in Proliferating Fibroblasts.		Murray, Iain A; Nichols, Robert G; Zhang, Limin; Patterson, Andrew D; Perdew, Gary H	Sci Rep (2016 Sep 23)	6 / 33969	PubMed Citation
Expression of the aryl hydrocarbon receptor contributes to the establishment of intestinal microbial ...		Ibrahim, Yehia M; Garimella, Sandilya V B; Tolmachev, Aleksey V; Baker, Erin S; Smith, Richard D	Anal Chem (2014 Jun 3)	86 / 5295-9	PubMed Citation
Improving ion mobility measurement sensitivity by utilizing helium in an ion funnel trap.		Yao, Cong-Hui; Liu, Gao-Yuan; Yang, Kui; Gross, Richard W; Patti, Gary J	Metabolomics (2016 Sep)	12 /	PubMed Citation
Inaccurate quantitation of palmitate in metabolomics and isotope tracer studies due to plastics.					

Increasing Confidence of LC-MS Identifications by Utilizing Ion Mobility Spectrometry.	Cowell, Kevin L; Baker, Erin S; Payne, Samuel H; Ibrahim, Yehia M; Monroe, Matthew E; Slysz, Gordon W; LaMarche, Brian L; Petyuk, Vladislav A; Piehowski, Paul D; Danielson 3rd, William F; Anderson, Gordon A; Smith, Richard D	Int J Mass Spectrom (2013 Nov 15) 312-317	354-355 / 312-317	PubMed Citation
Inflammation triggers production of dimethylsphingosine from oligodendrocytes.	Chen, Y-J; Hill, S; Huang, H; Tarabotti, A; Cho, K; Gallo, R; Manchester, M; Shriver, L P; Patti, G J	Neuroscience (2014 Oct 24)	279 / 113-21	PubMed Citation
Interactive XCMS Online: simplifying advanced metabolomic data processing and subsequent statistical ...	Gowda, Harsha; Ivanisevic, Julijana; Johnson, Caroline H; Kurczy, Michael E; Benton, H Paul; Rinehart, Duane; Nguyen, Thomas; Ray, Jayashree; Kuehl, Jennifer; Arevalo, Bernardo; Westenskow, Peter D; Wang, Junhua; Arkin, Adam P; Deutschbauer, Adam M; Patti, Gary J; Siuzdak, Gary	Anal Chem (2014 Jul 15)	86 / 6931-9	PubMed Citation
Intestinal farnesoid X receptor signaling promotes nonalcoholic fatty liver disease.	Jiang, Changtao; Xie, Cen; Li, Fei; Zhang, Limin; Nichols, Robert G; Krausz, Kristopher W;	J Clin Invest (2015 Jan)	125 / 386-402	PubMed Citation

	Cai, Jingwei; Qi, Yunpeng; Fang, Zhong-Ze; Takahashi, Shogo; Tanaka, Naoki; Desai, Dhimant; Amin, Shantu G; Albert, Istvan; Patterson, Andrew D; Gonzalez, Frank J	Jiang, Changtao; Xie, Cen; Lv, Ying; Li, Jing; Krausz, Kristopher W; Shi, Jingmin; Brocker, Chad N; Desai, Dhimant; Amin, Shantu G; Bisson, William H; Liu, Yulan; Gavrilova, Oksana; Patterson, Andrew D; Gonzalez, Frank J	Nat Commun (2015)	6 / 10166	PubMed Citation
Intestine-selective farnesoid X receptor inhibition improves obesity-related metabolic dysfunction.					
Ion Mobility and Tandem Mass Spectrometry of Phosphatidylglycerol and Bis(monoacylglycerol)phosphate ...	Hankin, Joseph A; Murphy, Robert C; Barkley, Robert M; Gijón, Miguel A	Int J Mass Spectrom (2015 Feb 15)	378 / 255-263	378 / 255-263	PubMed Citation
Kernel approaches for differential expression analysis of mass spectrometry-based metabolomics data.	Zhan, Xiang; Patterson, Andrew D; Ghosh, Debasish	BMC Bioinformatics (2015 Mar 11)	16 / 77	16 / 77	PubMed Citation
Knockdown of triglyceride synthesis does not enhance palmitate lipotoxicity or prevent oleate-mediat ...	Leamy, Alexandra K; Hasenour, Clinton M; Egnatchik, Robert A; Trenary, Irina A; Yao, Cong-Hui; Patti, Gary J; Shiota, Masakazu; Young, Jamey D	Biochim Biophys Acta (2016 Sep)	1861 / 1005-14	1861 / 1005-14	PubMed Citation

Lactate metabolism is associated with mammalian mitochondria.	Chen, Ying-Jr; Mahieu, Nathaniel G; Huang, Xiaojing; Singh, Manmilan; Crawford, Peter A; Johnson, Stephen L; Gross, Richard W; Schaefer, Jacob; Patti, Gary J	Nat Chem Biol (2016 Nov)	12 / 937-943	PubMed Citation
LC-IMS-MS Feature Finder: detecting multidimensional liquid chromatography, ion mobility and mass sp ...	Crowell, Kevin L; Slysz, Gordon W; Baker, Erin S; LaMarche, Brian L; Monroe, Matthew E; Ibrahim, Yehia M; Payne, Samuel H; Anderson, Gordon A; Smith, Richard D	Bioinformatics (2013 Nov 1)	29 / 2804-5	PubMed Citation
LC-MS-based metabolomics: an update.	Fang, Zhong-Ze; Gonzalez, Frank J	Arch Toxicol (2014 Aug)	88 / 1491-502	PubMed Citation
Liquid chromatography quadrupole time-of-flight mass spectrometry characterization of metabolites gu ...	Zhu, Zheng-Jiang; Schultz, Andrew W; Wang, Junhua; Johnson, Caroline H; Yannone, Steven M; Patti, Gary J; Siuzdak, Gary	Nat Protoc (2013 Mar)	8 / 451-60	PubMed Citation
Loss of FBP1 by Snail-mediated repression provides metabolic advantages in basal-like breast cancer.	Dong, Chenfang; Yuan, Tingting; Wu, Yadi; Wang, Yifan; Fan, Teresa W M; Miriyala, Sumitra; Lin, Yiwei; Yao, Jun; Shi, Jian; Kang, Tiebang; Lorkiewicz, Pawel; St Clair, Daret; Hung,	Cancer Cell (2013 Mar 18)	23 / 316-31	PubMed Citation

	Mien-Chie; Evers, B Mark; Zhou, Binhu P			
Mass Spectrometric Collisional Activation and Product Ion Mobility of Human Serum Neutral Lipid Extr ...	Hankin, Joseph A; Barkley, Robert M; Zemski-Berry, Karin; Deng, Yiming; Murphy, Robert C	Anal Chem (2016 Jun 21)	88 / 6274-82	PubMed Citation
Mass spectrometry-based monitoring of millisecond protein-ligand binding dynamics using an automated ...	Cong, Yongzheng; Katipamula, Shanta; Trader, Cameron D; Orton, Daniel J; Geng, Tao; Baker, Erin S; Kelly, Ryan T	Lab Chip (2016 Apr 26)	16 / 1544-8	PubMed Citation
Mechanism of formation of the major estradiol product ions following collisional activation of the m ...	Wooding, Kerry M; Barkley, Robert M; Hankin, Joseph A; Johnson, Christopher A; Bradford, Andrew P; Santoro, Nanette; Murphy, Robert C	J Am Soc Mass Spectrom (2013 Oct)	24 / 1451-5	PubMed Citation
Metabolite Signatures in Hydrophilic Extracts of Mouse Lungs Exposed to Cigarette Smoke Revealed by ...	Jz, Hu; X, Wang; J, Feng; Bj, Robertson; Km, Waters; Sc, Tilton; Jg, Pounds; Ra, Corley; M, Liu; M, Hu	Metabolomics (Los Angel) (2015 Jun)	5 /	PubMed Citation
Metabolomic data streaming for biology-dependent data acquisition.	Rinehart, Duane; Johnson, Caroline H; Nguyen, Thomas; Ivanisevic, Julijana; Benton, H Paul; Lloyd, Jessica; Arkin, Adam P; Deutschbauer, Adam M; Patti, Gary J; Siuzdak, Gary	Nat Biotechnol (2014 Jun)	32 / 524-7	PubMed Citation

Metabolomics dataset of PPAR-pan treated rat liver.	Ament, Zsuzsanna; West, James A; Stanley, Elizabeth; Li, Xuefei; Ashmore, Tom; Roberts, Lee D; Wright, Jayne; Nicholls, Andrew W; Griffin, Julian L	Data Brief (2016 8 / 196-202 Sep)	PubMed Citation
Metabolomics Reveals that Aryl Hydrocarbon Receptor Activation by Environmental Chemicals Induces Sy ...	Zhang, Limin; Hatzakis, Emmanuel; Nichols, Robert G; Hao, Ruixin; Correll, Jared; Smith, Philip B; Chiaro, Christopher R; Perdew, Gary H; Patterson, Andrew D	Environ Sci Technol (2015 Jul 7)	49 / 8067-77 PubMed Citation
Metabolomics: an essential tool to understand the function of peroxisome proliferator-activated rece ...	Montanez, Jessica E; Peters, Jeffrey M; Correll, Jared B; Gonzalez, Frank J; Patterson, Andrew D	Toxicol Pathol (2013 Feb)	41 / 410-8 PubMed Citation
Metastatic Melanoma Induced Metabolic Changes in C57BL/6J Mouse Stomach Measured by <sup>1</sup> H NMR Spectrosc ...	Wang, X; Hu, M; Liu, M; Hu, J Z	Metabolomics (Los Angel) (2014)	4 / PubMed Citation
Microbial determinants of biochemical individuality and their impact on toxicology and pharmacology.	Patterson, Andrew D; Turnbaugh, Peter J	Cell Metab (2014 Nov 4)	20 / 761-8 PubMed Citation
Microbiota-Dependent Hepatic Lipogenesis Mediated by Stearoyl CoA Desaturase 1 (SCD1) Promotes Metab ...	Singh, Vishal; Chassaing, Benoit; Zhang, Limin; San Yeoh, Beng; Xiao, Xia; Kumar, Manish; Baker, Mark T; Cai, Jingwei; Walker, Rachel; Borkowski, Kamil; Harvatine, Kevin J; Singh, Nagendra; Shearer, Gregory	Cell Metab (2015 Dec 01)	22 / 983-96 PubMed Citation

	C; Ntambi, James M; Joe, Bina; Patterson, Andrew D; Gewirtz, Andrew T; Vijay-Kumar, Matam	O'Brien, Peter J; Lee, Michelle; Spilker, Mary E; Zhang, Cathy C; Yan, Zhengming; Nichols, Timothy C; Li, Wenlin; Johnson, Caroline H; Patti, Gary J; Siuzdak, Gary	Cancer Metab (2013)	1 / 4	PubMed Citation
Monitoring metabolic responses to chemotherapy in single cells and tumors using nanostructure-initia ...	Muscle Segment Homeobox Genes Direct Embryonic Diapause by Limiting Inflammation in the Uterus.	Cha, Jeeyeon; Burnum-Johnson, Kristin E; Bartos, Amanda; Li, Yingju; Baker, Erin S; Tilton, Susan C; Webb-Robertson, Bobbie-Jo M; Piehowski, Paul D; Monroe, Matthew E; Jegga, Anil G; Murata, Shigeo; Hirota, Yasushi; Dey, Sudhansu K	J Biol Chem (2015 Jun 12)	290 / 15337-49	PubMed Citation
Noninvasive urinary metabolomic profiling identifies diagnostic and prognostic markers in lung cancer ...	Mathé, Ewy A; Patterson, Andrew D; Haznadar, Majda; Manna, Soumen K; Krausz, Kristopher W; Bowman, Elise D; Shields, Peter G; Idle, Jeffrey R; Smith, Philip B; Anami, Katsuhiro; Kazandjian, Dickran G; Hatzakis, Emmanuel;	Cancer Res (2014 Jun 15)	74 / 3259-70	PubMed Citation	

Optimization of harvesting, extraction, and analytical protocols for UPLC-ESI-MS-based metabolomic analysis of rat liver tissue.	Gonzalez, Frank J; Harris, Curtis C Bi, Huichang; Krausz, Kristopher W; Manna, Soumen K; Li, Fei; Johnson, Caroline H; Gonzalez, Frank J	Anal Bioanal Chem (2013 Jun)	405 / 5279-89	PubMed Citation
Persistent Organic Pollutants Modify Gut Microbiota-Host Metabolic Homeostasis in Mice Through Aryl ...	Zhang, Limin; Nichols, Robert G; Correll, Jared; Murray, Iain A; Tanaka, Naoki; Smith, Philip B; Hubbard, Troy D; Sebastian, Aswathy; Albert, Istvan; Hatzakis, Emmanuel; Gonzalez, Frank J; Perdew, Gary H; Patterson, Andrew D	Environ Health Perspect (2015 Jul)	123 / 679-88	PubMed Citation
Platelet lipidomics: modern day perspective on lipid discovery and characterization in platelets.	O'Donnell, Valerie B; Murphy, Robert C; Watson, Steve P	Circ Res (2014 Mar 28)	114 / 1185-203	PubMed Citation
PPAR-pan activation induces hepatic oxidative stress and lipidomic remodelling.	Ament, Zsuzsanna; West, James A; Stanley, Elizabeth; Ashmore, Tom; Roberts, Lee D; Wright, Jayne; Nicholls, Andrew W; Griffin, Julian L	Free Radic Biol Med (2016 Jun)	95 / 357-68	PubMed Citation
Preclinical models for interrogating drug action in human cancers using Stable Isotope Resolved Metabolomics.	Lane, Andrew N; Higashi, Richard M; Fan, Teresa W-M	Metabolomics (2016 Jul)	12 /	PubMed Citation
Profiling thiol metabolites and quantification of cellular glutathione using FT-ICR-MS spectrometry.	Gori, Sadakatali S; Lorkiewicz, Pawel; Ehringer, Daniel S; Belshoff, Alex C; Higashi, Richard	Anal Bioanal Chem (2014 Jul)	406 / 4371-9	PubMed Citation

	M; Fan, Teresa W-M; Nantz, Michael H	Sellers, Katherine; Fox, Matthew P; Bousamra 2nd, Michael; Slone, Stephen P; Higashi, Richard M; Miller, Donald M; Wang, Yali; Yan, Jun; Yuneva, Mariia O; Deshpande, Rahul; Lane, Andrew N; Fan, Teresa W-M	J Clin Invest (2015 Feb)	125 / 687-98	PubMed Citation
Pyruvate carboxylase is critical for non-small-cell lung cancer proliferation.					
Quantitative analysis of purine nucleotides indicates that purinosomes increase de novo purine biosy ...	Zhao, Hong; Chiaro, Christopher R; Zhang, Limin; Smith, Philip B; Chan, Chung Yu; Pedley, Anthony M; Pugh, Raymond J; French, Jarrod B; Patterson, Andrew D; Benkovic, Stephen J	J Biol Chem (2015 Mar 13)	290 / 6705-13	PubMed Citation	
Regulation of mammalian nucleotide metabolism and biosynthesis.	Lane, Andrew N; Fan, Teresa W-M	Nucleic Acids Res (2015 Feb 27)	43 / 2466-85	PubMed Citation	
Role in tumor growth of a glycogen debranching enzyme lost in glycogen storage disease.	Guin, Sunny; Pollard, Courtney; Ru, Yuanbin; Ritterson Lew, Carolyn; Duex, Jason E; Dancik, Garrett; Owens, Charles; Spencer, Andrea; Knight, Scott; Holemon, Heather; Gupta, Sounak; Hansel, Donna;	J Natl Cancer Inst (2014 May)	106 /	PubMed Citation	

	Hellerstein, Marc; Lorkiewicz, Pawel; Lane, Andrew N; Fan, Teresa W-M; Theodorescu, Dan			
Role of fibroblast growth factor 21 in the early stage of NASH induced by methionine- and choline-de ...	Tanaka, Naoki; Biochim Takahashi, Biophys Acta Shogo; Zhang, (2015 Jul) Yuan; Krausz, Kristopher W; Smith, Philip B; Patterson, Andrew D; Gonzalez, Frank J	1852 / 1242-52	PubMed Citation	
Role of white adipose lipolysis in the development of NASH induced by methionine- and choline-defici ...	Tanaka, Naoki; Biochim Takahashi, Biophys Acta Shogo; Fang, (2014 Nov) Zhong-Ze; Matsubara, Tsutomu; Krausz, Kristopher W; Qu, Aijuan; Gonzalez, Frank J	1841 / 1596-607	PubMed Citation	
SDHB-Deficient Cancers: The Role of Mutations That Impair Iron Sulfur Cluster Delivery.	Saxena, Neetu; J Natl Cancer Maio, Nunziata; Inst (2016 Jan) Crooks, Daniel R; Ricketts, Christopher J; Yang, Youfeng; Wei, Ming-Hui; Fan, Teresa W-M; Lane, Andrew N; Sourbier, Carole; Singh, Anamika; Killian, J Keith; Meltzer, Paul S; Vocke, Cathy D; Rouault, Tracey A; Linehan, W Marston	108 /	PubMed Citation	
Sealed rotors for in situ high temperature high pressure MAS NMR.	Hu, Jian Zhi; Hu, Chem Commun Mary Y; Zhao, (Camb) (2015 Zhenchao; Xu, Sep 11) Suochang; Vjunov, Aleksei; Shi, Hui; Camaioni,	51 / 13458-61	PubMed Citation	

	Donald M; Peden, Charles H F; Lercher, Johannes A	Burnum-Johnson, Mol Cell Kristin E; Nie, Proteomics Song; Casey, (2016 Dec) Cameron P; Monroe, Matthew E; Orton, Daniel J; Ibrahim, Yehia M; Gritsenko, Marina A; Clauss, Therese R W; Shukla, Anil K; Moore, Ronald J; Purvine, Samuel O; Shi, Tujin; Qian, Weijun; Liu, Tao; Baker, Erin S; Smith, Richard D	15 / 3694-3705	PubMed Citation
Simultaneous Proteomic Discovery and Targeted Monitoring using Liquid Chromatography, Ion Mobility S ...	Fan, Teresa W-M; Lane, Andrew N; Higashi, Richard M	Bio Protoc (2016 6 / Feb 5)		PubMed Citation
Stable Isotope Resolved Metabolomics Studies in Ex Vivo TIssue Slices.	Li, Fei; Pang, Xiaoyan; Krausz, Kristopher W; Jiang, Changtao; Chen, Chi; Cook, John A; Krishna, Murali C; Mitchell, James B; Gonzalez, Frank J; Patterson, Andrew D	J Proteome Res 12 / 1369-76		PubMed Citation
Stable isotope- and mass spectrometry-based metabolomics as tools in drug metabolism: a study expand ...	Higashi, Richard M; Fan, Teresa W-M; Lorkiewicz, Pawel K; Moseley, Hunter N B; Lane, Andrew N	Methods Mol Biol (2014) 1198 / 147-67		PubMed Citation

Structural analysis of N- and O-glycans using ZIC-HILIC/dialysis coupled to NMR detection.	Qu, Yi; Feng, Ju; Deng, Shuang; Cao, Li; Zhang, Qibin; Zhao, Rui; Zhang, Zhaorui; Jiang, Yuxuan; Zink, Erika M; Baker, Scott E; Lipton, Mary S; Paša-Tolić, Ljiljana; Hu, Jian Zhi; Wu, Si	Fungal Genet Biol (2014 Nov)	72 / 207-15	PubMed Citation
Studies of Secondary Melanoma on C57BL/6J Mouse Liver Using <sup>1</sup> H NMR Metabolomics.	Feng, Ju; Isern, Nancy G; Burton, Sarah D; Hu, Jian Zhi	Metabolites	3 / 1011-35	PubMed Citation
Surprising impact of remote groups on the folding--unfolding and dimer-chain equilibria of bifunctional ...	Liu, Rui; Chen, Shuang; Cheng, Shuang; Baker, Erin S; Smith, Richard D; Zeng, Xiao Cheng; Gong, Bing	Chem Commun (Camb)	52 / 3773-6 Mar 07	PubMed Citation
Tandem mass spectrometry of novel ether-linked phospholipid analogs of anionic pulmonary surfactant ...	Fickes, Rachel; Voelker, Dennis R; Berry, Karin Zemski; Murphy, Robert C	Rapid Commun Mass Spectrom	30 / 2601-2606 (2016 Dec 30)	PubMed Citation
The disruption of Celf6, a gene identified by translational profiling of serotonergic neurons, results in ...	Dougherty, Joseph D; Maloney, Susan E; Wozniak, David F; Rieger, Michael A; Sonnenblick, Lisa; Coppola, Giovanni; Mahieu, Nathaniel G; Zhang, Juliet; Cai, Jinlu; Patti, Gary J; Abrahams, Brett S; Geschwind, Daniel H; Heintz, Nathaniel	J Neurosci	33 / 2732-53 Feb 13	PubMed Citation

The fungal cultivar of leaf-cutter ants produces specific enzymes in response to different plant sub ...	Khadempour, Lily; Burnum-Johnson, Kristin E; Baker, Erin S; Nicora, Carrie D; Webb-Robertson, Bobbie-Jo M; White 3rd, Richard A; Monroe, Matthew E; Huang, Eric L; Smith, Richard D; Currie, Cameron R	Mol Ecol (2016 Nov)	25 / 5795-5805	PubMed Citation
The isotridecanyl side chain of plusbacin-A3 is essential for the transglycosylase inhibition of pep ...	Kim, Sung Joon; Singh, Manmilian; Wohlrab, Aaron; Yu, Tsyr-Yan; Patti, Gary J; O'Connor, Robert D; VanNieuwenhze, Michael; Schaefer, Jacob	Biochemistry (2013 Mar 19)	52 / 1973-9	PubMed Citation
Thermally-Induced Substrate Release Via Intramolecular Cyclizations of Amino Esters and Amino Carbon ...	Knipp, Ralph J; Estrada, Rosendo; Sethu, Palaniappan; Nantz, Michael H	Tetrahedron (2014 May 1)	70 / 3422-3429	PubMed Citation
Toward 'omic scale metabolite profiling: a dual separation-mass spectrometry approach for coverage o ...	Ivanisevic, Julijana; Zhu, Zheng-Jiang; Plate, Lars; Tautenhahn, Ralf; Chen, Stephen; O'Brien, Peter J; Johnson, Caroline H; Marletta, Michael A; Patti, Gary J; Siuzdak, Gary	Anal Chem (2013 Jul 16)	85 / 6876-84	PubMed Citation
Towards metabolic biomarkers of insulin resistance and type 2 diabetes: progress from the metabolome ...	Roberts, Lee D; Koulman, Albert; Griffin, Julian L	Lancet Diabetes Endocrinol (2014 Jan)	2 / 65-75	PubMed Citation

Uncovering biologically significant lipid isomers with liquid chromatography, ion mobility spectrometry ...	Kyle, Jennifer E; Zhang, Xing; Weitz, Karl K; Monroe, Matthew E; Ibrahim, Yehia M; Moore, Ronald J; Cha, Jeeyeon; Sun, Xiaofei; Lovelace, Erica S; Wagoner, Jessica; Polyak, Stephen J; Metz, Thomas O; Dey, Sudhansu K; Smith, Richard D; Burnum-Johnson, Kristin E; Baker, Erin S	Analyst (2016 Mar 7)	141 / 1649-59	PubMed Citation
Warpgroup: increased precision of metabolomic data processing by consensus integration bound analysis ...	Mahieu, Nathaniel G; Spalding, Jonathan L; Patti, Gary J	Bioinformatics (2016 Jan 15)	32 / 268-75	PubMed Citation
X13CMS: global tracking of isotopic labels in untargeted metabolomics.	Huang, Xiaojing; Chen, Ying-Jr; Cho, Kevin; Nikolskiy, Igor; Crawford, Peter A; Patti, Gary J	Anal Chem (2014 Feb 4)	86 / 1632-9	PubMed Citation
XCMS Online: a web-based platform to process untargeted metabolomic data.	Tautenhahn, Ralf; Patti, Gary J; Rinehart, Duane; Siuzdak, Gary	Anal Chem (2012 Jun 5)	84 / 5035-9	PubMed Citation